

REMARKS

As suggested by the Examiner, and as amended herein above, the title of the present invention is now: "RECTIFIER APPARATUS FOR HIGH VOLTAGES."

Accordingly, the pending objection to the Specification has been overcome.

The Examiner has raised an objection to the drawings as set forth in items No. 2 on page 2 of the Official Action, and not repeated herein. Applicants, respectfully traverse this grounds for objection.

The Examiner has suggested that the feature "machine-side three-point pulse converter" must be illustrated, or else this feature must be deleted from the claims. Fig. 1, in which a known voltage intercircuit converter is illustrated, exhibits a **machine-side** current converter 14 executed in a **three-point circuiting technology**. Figs. 3 to 5 each show **phase modules** of said machine-side current converter, the series switch number varying from one through two to three. Said series switch number specifies how many semiconductor switches are to be used per converter valve T1, T2, T3 or T4. Each of these **phase modules** is executed in a **three-point circuiting technology**. Since the invention relates to an improved embodiment of the network-side converter, Fig. 2, for the sake of clarity, shows only the network-side converter executed according to the invention.

The foregoing is believed to be fully responsive to the Examiner's objection to the drawings.

On the merits, the Examiner has rejected Claims 1-6 under 35 U.S.C. §102(b) as anticipated by the Ji Zhang reference identified in the International Search Report. According to the Examiner, the Ji Zhang publication discloses a high performance control of three level IGBT

inverter fed AC drive, and apparently relies on figures 1 and 3 in the Ji Zhang reference. Applicants respectfully traverse this ground for rejection.

Fig. 1 of the Jie Zhang citation shows a voltage intercircuit converter comprising a converter in three-point circuiting technology on the machine side, and two part-converters electrically connected in series on the network side. These two part-converters are connected on the input side to secondary windings of current transformers differently circuited ( $\Delta$ ,  $\Lambda$  connection). Therefore, these two part-converters in combination with the two differently circuited secondary windings form a **12-pulse** input converter. Thyristors are employed as semiconductor switches, not semiconductor switches that can be switched off.

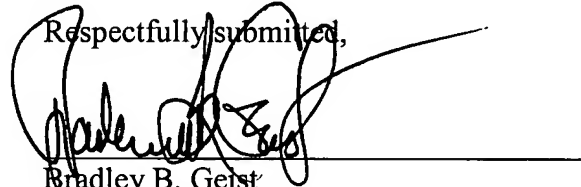
In the text (page 1, right-hand column, third paragraph) of the Ji Zhang citation, it is mentioned that **instead of** the two part-converters (rectifiers), a self-guided pulse converter ("three-level PWM rectifier") may be employed. Thus, this network-side converter would then correspond to the machine-side converter. Fig. 3 of the Jie Zhang citation represents a block diagram of a field-oriented control for the machine-side three-point pulse converter. What this field-oriented control may have to do with the embodiment of the network-side converter according to the invention, Applicants fail to understand.

Accordingly, Applicants respectfully request reconsideration and allowance of the pending claims over the cited Ji Zhang reference, in view of the differences between the presently claimed invention and what is disclosed in Ji Zhang.

PATENT

Applicants note in passing that their corresponding German application (PCT/DE00/01847) was granted on April 2, 2003, in which Applicants successfully overcame a "lack of novelty" rejection based on Ji Zhang.

Respectfully submitted,



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